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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------------------------------------------------|-------------|----------------------|------------------------|------------------|
| 10/734,726 | 12/12/2003 | David M. Murphy | 2507-7830US (22120-US) | 1945 |
| 60794 | 7590 | 03/30/2007 | EXAMINER | |
| TRASKBRITT, P.C./ ALLIANT TECH SYSTEMS P.O. BOX 2550 SALT LAKE CITY, UT 84110 | | | A, PHI DIEU TRAN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3637 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTHS | 03/30/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/734,726 | MURPHY ET AL. | |
| | Examiner | Art Unit | |
| | Phi D. A | 3637 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 and 40 is/are pending in the application.
- 4a) Of the above claim(s) 4-6,11,12 and 14-19 is/are withdrawn from consideration.
- 5) Claim(s) is/are allowed.
- 6) Claim(s) 1-3,8-10,13,20-25 and 40 is/are rejected.
- 7) Claim(s) 7 is/are objected to.
- 8) Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. .
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u> </u> |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u> </u> | 6) <input type="checkbox"/> Other: <u> </u> |

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 8-9, 13, 21, 25, 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Slysh (4337560).

Slysh (figures 5, 7,14) shows a deployable truss comprising a plurality of column members (figure 14) connected at their ends to form a deployable truss that forms a rigid structure in a deployed state and that has a stowage volume less than its deployed volume in a collapsed state, at least some of the plurality of column members comprising column assemblies including a plurality of strut members (figure 14 the top and bottom parts 21), each strut member of an associated column assembly being connected to each other of the associated column assembly at a first end of the column assembly and at a second end of the column assembly (see figure 14), the strut members of a column assembly being substantially symmetrically arranged about a centerline of the column assembly, the strut members of a column assembly are further connected to each other at a location between first and second ends of the column assembly when the truss is in the deployed state (in the deployed state, the strut

members are further from each other at a location between the first and second ends of the column assembly when the truss is in the deployed state (see figure 14), each column assembly further comprising a spacer (the structure which separates the two struts 21) connecting the plurality of strut members of the column assembly at a location between the first end and the second end of the column assembly the spacer connects the strut member of the assembly near a midpoint between the first and second ends of the assembly, at least one of the plurality of strut members comprising a rod (figure 14 shows two flat rods 21), each of the column assemblies is tapered on at least one end, the plurality of strut members of the column assembly taper toward a centerline of the column assembly at the first and second ends of the column assembly when the truss is in the deployed state, each of the column assemblies is tapered on at least one end (with respect to the center line),

Per claim 40, Slysh (figures 4, 140 shows a deployable truss comprising a plurality of contiguously attached deployable bays forming a rigid space truss when in a deployed state and having a stowage volume substantially less than their deployed volume when in a collapsed state, each bay comprising a plurality of column members (figure 14), at least some of the plurality of column members comprising column assemblies having a centerline, each column assembly comprising a plurality of struts (figure 14, parts 21 top and bottom), each strut member being connected to each other strut member at a first end of the column assembly and at a second end of the column assembly, the plurality of strut members being substantially symmetrically arranged about the centerline of the column assembly.

3. Claims 1, 8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Slysh (4337560).

Slysh (figures 5, 1-9) shows a deployable truss comprising a plurality of column members (figure 5) connected at their ends to form a deployable truss that forms a rigid structure in a deployed state and that has a stowage volume less than its deployed volume in a collapsed state, at least some of the plurality of columns members comprising columns assemblies including a plurality of strut members (figure 9 shows the struts separated by the hinge and the other border at 16), each strut member of an associated column assembly being connected to each other strut member of the associated column assembly at a first end of the column assembly and at a second end of the column assembly (see figure 7), each column assembly further comprising a spacer (made of springs 20) connecting the plurality of strut members of the column assembly at a location between the first end and the second end of the column assembly the spacer connects the strut member of the assembly near a midpoint between the first and second ends of the assembly, the spacer is collapsible to a stowed configuration (figure 12) when the truss is in the collapsed state and expandable to a deployed configuration (figure 13) that radially spaces the plurality of strut members of the column assembly away from a longitudinal centerline of the column assembly when the truss is in the deployed state.

4. Claims 1, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Zanardo (4557083).

Zanardo (figure 1) shows a deployable truss comprising a plurality of column members (figure 1 shows a column member made up of two struts 8) connected at their ends to form a deployable truss that forms a rigid structure in a deployed state and that has a stowage volume less than its deployed volume in a collapsed state, at least some of the plurality of columns members comprising columns assemblies including a plurality of strut members (each column

having two struts), each strut member of an associated column assembly being connected to each other of the associated column assembly at a first end of the column assembly and at a second end of the column assembly (through part 13), the plurality of strut members comprising tubes.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slysh (4337560).

Slysh shows all the claimed limitations except for the strut members being formed from a continuous fiber reinforced composite material, the material comprising glass fibers, the material comprising graphite fibers.

It would have been obvious to one having ordinary skill in the art the time of the invention to modify Slysh to show the strut members being formed from a continuous fiber reinforced composite material, the material comprising glass fibers, the material comprising graphite fibers because the materials are well known material for reinforcing a rod as it enables the rod to resist bending and increase structural strength.

Response to Arguments

7. Applicant's arguments with respect to claims 1-3,8-10, 13, 20-25, 40 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

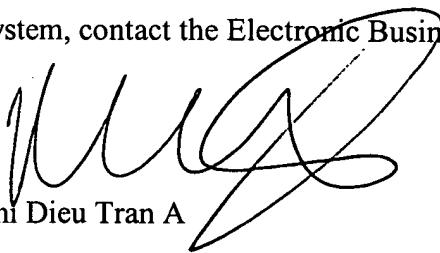
8. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Phi Dieu Tran A

3/29/07